

a receiving means for receiving an input data stream having a plurality of channels of at least one of audio data and video data being multiplexed in a predetermined order;

a demultiplexing means for demultiplexing each one of said plurality of channels from the received input data stream;

a plurality of recording means for recording the demultiplexed each one so that random access is possible, wherein one of said plurality of recording means is configured to record exactly one of said plurality of channels;

a reproducing means for reproducing the recorded each one from said plurality of recording means; and

a multiplexing means for multiplexing the reproduced each one in said predetermined order and generating an output data stream,

wherein each of said plurality of recording means adopts a mirror configuration having a plurality of recording apparatuses for recording the same audio and/or video data.

3. (Twice Amended) An audio and/or video data recording and reproducing [apparatus according to claim 1, wherein: apparatus, comprising:

a receiving means for receiving an input data stream having a plurality of channels of at least one of audio data and video data being multiplexed in a predetermined order;

a demultiplexing means for demultiplexing each one of said plurality of channels from the received input data stream;

a plurality of recording means for recording the demultiplexed each one so that random access is possible, wherein one of said plurality of recording means is configured to record exactly one of said plurality of channels;

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a reproducing means for reproducing the recorded each one from said plurality of recording means; and  
a multiplexing means for multiplexing the reproduced each one in said predetermined order and generating an output data stream,  
wherein each of said plurality of recording means adopts an array configuration in which a plurality of recording apparatuses are connected in parallel.

4. (Twice Amended) An audio and/or video data recording and reproducing apparatus [according to claim 1, further] comprising:

a receiving means for receiving an input data stream having a plurality of channels of at least one of audio data and video data being multiplexed in a predetermined order;

a demultiplexing means for demultiplexing each one of said plurality of channels from the received input data stream;

a plurality of recording means for recording the demultiplexed each one so that random access is possible, wherein one of said plurality of recording means is configured to record exactly one of said plurality of channels;

a reproducing means for reproducing the recorded each one from said plurality of recording means;

a multiplexing means for multiplexing the reproduced each one in said predetermined order and generating an output data stream;  
and

a recording and reproduction control means for controlling a recording operation of said plurality of recording means and a reproduction operation of said reproducing means based on control data,

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wherein said input data stream includes multiplexed control data, and

wherein said demultiplexing means further demultiplexes said control data from the received input data stream.

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8. (Twice Amended) An audio and/or video data recording and reproduction [method according to claim 7, wherein:] method, comprising the steps of:

receiving an input data stream having a plurality of channels of at least one of audio data and video data being multiplexed in a predetermined order;

demultiplexing each one of said plurality of channels from the received input data stream;

recording the demultiplexed each one so that random access is possible, wherein one of said plurality of channels is recorded on exactly one of a plurality of recording means for recording;

reproducing the recorded each one from said plurality of recording means; and

multiplexing the reproduced each one in said predetermined order and generating an output data stream.

wherein the demultiplexed each one is duplicated on more than one recording medium to perform backup of the demultiplexed each one.

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12. (Amended) An audio and/or video data recording and reproducing [apparatus according to claim 11, wherein:] apparatus, comprising:

an input circuit configured to receive an input data stream having a plurality of channels of at least one of audio data and video data being multiplexed in a predetermined order;

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a data controller circuit configured to demultiplex each one of said plurality of channels from the received input data stream;

a plurality of disk drives configured to record the demultiplexed each one so that random access is possible, wherein one of said plurality of disk drives is configured to record exactly one of said plurality of channels, and wherein at least one of said plurality of disk drives is further configured to reproduce the recorded each one from said plurality of disk drives; and

a multiplexer circuit configured to multiplex the reproduced each one in said predetermined order and to generate an output data stream,

wherein each of said plurality of disk drives adopts a mirror configuration having a plurality of recording apparatuses for recording the same audio and/or video data.

13. (Amended) An audio and/or video data recording and reproducing [apparatus according to claim 11, wherein:] apparatus, comprising:

an input circuit configured to receive an input data stream having a plurality of channels of at least one of audio data and video data being multiplexed in a predetermined order;

a data controller circuit configured to demultiplex each one of said plurality of channels from the received input data stream;

a plurality of disk drives configured to record the demultiplexed each one so that random access is possible, wherein one of said plurality of disk drives is configured to record exactly one of said plurality of channels, and wherein at least one of said plurality of disk drives is further configured to reproduce the recorded each one from said plurality of disk drives; and

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a multiplexer circuit configured to multiplex the reproduced each one in said predetermined order and to generate an output data stream,

wherein each of said plurality of disk drives adopts an array configuration in which a plurality of recording apparatuses are connected in parallel.

14. (Amended) An audio and/or video data recording and reproducing apparatus [according to claim 11, further] comprising:

an input circuit configured to receive an input data stream having a plurality of channels of at least one of audio data and video data being multiplexed in a predetermined order;

a data controller circuit configured to demultiplex each one of said plurality of channels from the received input data stream;

a plurality of disk drives configured to record the demultiplexed each one so that random access is possible, wherein one of said plurality of disk drives is configured to record exactly one of said plurality of channels, and wherein at least one of said plurality of disk drives is further configured to reproduce the recorded each one from said plurality of disk drives;

a multiplexer circuit configured to multiplex the reproduced each one in said predetermined order and to generate an output data stream; and

a control circuit configured to control a recording operation of said plurality of disk drives and a reproduction operation of said at least one disk drive based on control data,

wherein said input data stream includes multiplexed control data, and

wherein said data controller circuit is further configured to demultiplex said control data from the received input data stream.